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Abstract

The vital problem over the Wireless Sensor Networks (WSNs) are that they are often vulnerable to attacks where an adversary can easily compromise some of the nodes, can reprogram, and then, can imitate them in a large number. They distribute the clones in the network, launching node replication attacks or clone attacks by loading secret information into several replicated nodes and rejoining these nodes to execute malicious behaviors or threaten underlying protocols. Earlier works against clone attacks suffer from either a high storage or poor detection accuracy. In this paper we are proposing a new remedial, algorithm called RERD

(Region based – Efficient, Randomized, and distributed) that detects the clone attack achieving a higher probability of detection. The wireless zone is partitioned into regions with the new DRCS algorithm followed by clone detection using TWG algorithm which is a combination of Token message and witness node.

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Index Terms

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Keywords

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